

WHAT IS CLAIMED IS:

1. A data processing system which allocates necessary resources to requesting clients, comprising:

5 grouping means for defining groups of resources;

group management means for managing the groups defined by said grouping means;

detection means, responsive to a request from a client that demands a specific group of resources, for
10 detecting such a member resource of the requested group that is currently used by any other client;

determination means for determining, if said detection means has detected a member resource in use, whether the detected member resource is to be modified;

15 and

permission means for permitting the requesting client to make access to the requested group of resources if said detection means finds that none of the member resources of the requested group are being used by any
20 other client, or if said determination means finds that neither the client using the requested resource nor the requesting client intends to modify the detected member resource in use.

25 2. The data processing system according to claim 1, further comprising allocation right memory means for storing information about whether each client has a

right to be allocated a group,

wherein said permission means examines the information stored in said allocation right memory means and rejects the request if the requesting client has no
5 right to be allocated a group.

3. The data processing system according to claim 1, further comprising grouping right memory means for storing information about whether each client has a
10 right to define a new group,

wherein said grouping means examines the information stored in said grouping right memory means and rejects the request if the requesting client has no right to define a new group.
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4. The data processing system according to claim 1, wherein said grouping of resources includes addition or removal of a member resource to/from an existing group.
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5. The data processing system according to claim 1, wherein said group management means further manages a valid period of each group and automatically removes such a group whose valid period has expired.
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6. The data processing system according to claim 1, wherein said detection means and determination

means operate on a group-by-group basis.

7. A computer readable medium storing a program which allocates necessary resources to requesting clients, the program causing a computer system to function as:

grouping means for defining groups of resources;

group management means for managing the groups defined by said grouping means;

10 detection means, responsive to a request from a client that demands a specific group of resources, for detecting such a member resource of the requested group that is currently used by any other client;

determination means for determining, if said
15 detection means has detected a member resource in use, whether the detected member resource is to be modified; and

permission means for permitting the requesting client to make access to the requested group of resources
20 if said detection means finds that none of the member resources of the requested group are being used by any other client, or if said determination means finds that neither the client using the requested resource nor the requesting client intends to modify the detected member
25 resource in use.